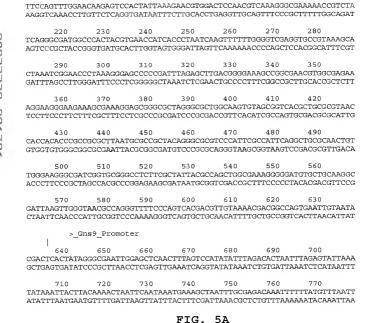


Fig. 47



CACCTAAATTGTAAGCGTTAATATTTTGTTAAAATTCGCGTTAAATTTTTGTTAAATCAGCTCATTTTTT GTGGATTTAACATTCGCAATTATAAAACAATTTTAAGCGCAATTTAAAAACAATTTAGTCGAGTAAAAAA

AACCAATAGGCCGAAATCGGCAAAATCCCTTATAAATCAAAAGAATAGACCGAGATAGGGTTGAGTGTTG

| ### ANTICORTANTITAGGATATTACTTAGGATCACATAGACTAATCATGGATTAATTA | 780 | 790 | 800 | 810 | 820 | 830 | 840 | |
|--|-----------------|----------------|--------------|------------|---|---------------|--|------|
| ### TTAGGTATTAATCTCTTACAAATGACATGATGATGTATCTGATTAGTACCTAATTAAT | AATCCATAATT | AGAGAATGTT | TACTGTAG | CATCACATAC | ACTAATCA | IGGATTAATT | AGGCTCAATAG | те |
| ### 850 860 870 880 890 900 910 TCGTCTGTGAATTAGTCCAAGATTATGGATGGATTTATTATATAGTCTACGTTTAATATTTATATTAGAGGAGCACTTAATCAGTTCAAGATTATTAGAATAATTAGAGAGGAGCACTTAAATCAGATTATAGAATAATTAAT | | | | | | | | |
| TCGTCTCGTGAATTAGTCCAAGATTATGGATGATTTATTATATAGTCTACGTTTAATATTTATATTAGAGAGAG | | | | | | | | |
| TCGTCTCGTGAATTAGTCCAAGATTATGGATGATTTATTATATAGTCTACGTTTAATATTTATATTAGAGAGAG | | | | | | | | |
| TCGTCTCGTGAATTAGTCCAAGATTATGGATGATTTATTATATAGTCTACGTTTAATATTTATATTAGAGAGAG | 850 | 860 | 870 | 880 | 900 | 000 | 010 | |
| AGCAGAGCACTTAATCAGGTTCTAATACCTACCTAAAATAATTATCAGATGCAAATTATAAATATTAATC 920 930 940 950 960 970 980 TGTTCAAACATCCGATGTGATAGGGACTTAAAAAGTTTAGTCCCATCTAAACAGGGCCACAGTCTATGTGACAGTTCAATTGTAGGTAAACACTCCTGAATTTTTCAAATCAGGGTAGATTTTTCCCGGTGTCAGATACAC 990 1000 1010 1020 1030 1040 1050 GAGCATGTCCACCGACCGATAAATATTGCAAAGCCCAGAAATGATTTTGGTCCCACATGCCAGAAACTCTCGTCACCAACTGCCAGAAACTCTCCGGTCTTTGAAAACCAAGGGTGTACGGTCTTTGA 1060 1070 1080 1090 1100 1110 1120 ACCACACCCACATTCGGTTCATTTTCAGCTCAGGAAAATCGTCCAACAATTTCAGCTCAGGAAATTAAATTGGGTGTGTAAAGCCAAGGAAACAGGTCCATTTTAACTTTTTTTT | | | | | | | | |
| 920 930 940 950 960 970 980 TGTTCAAACATCCGATGTGATAGGGACTTAAAAAGTTTAGTCCCATCTAAACAGGGCCACACTCTATGTG ACAAGTTTGTAGGCTACCATATCCCTGAATTTTTCAAATCAGGTAGATTTGTCCCGGTGTCAGATACAC 990 1000 1010 1020 1030 1040 1050 GAGGCATGTTCACCGAACACCGATAAATATTGCAAAGCCCAGAATGATTTTGTCCCAGTATCCCTCCACATGCCAGAACACTCTTAGAACATGCCAAACTTTGTCCCAGAACACCGATAAATATTGCAAAGCCCAGAATGATTTTGTCCCAGTATCCCAGAAACT CTCGTACAAGTGGCTTGTGGCTATTTAAACGTTTCAGGTCTTACTAAAAACCAGGGTGTACGGTCTTTGA 1060 1070 1080 1090 1100 1110 1120 ACCACACCCCACATTTCGGTTCATTTCAGCTCCAGGAAATATCGGTCCAACAATTTCAGCTCAGGAAATTAAA TGGTGTGGTG | | | | | | | | |
| TGTTCAAACATCCGATGTGATAGGGACTTAAAAAGTTTAGTCCCATCTAAACAGGGCCACAGTCTATGTG ACAAGTTTGTTGAGCTACCATTCCCTGAATTTTTCAAATCAGGTTAGATTTTGCCGGTGTCAGATACAC 990 1000 1010 1020 1030 1040 1050 GAGCATGTCACCACACCCGATAAATATTGCAAAGCCCACAATGATTTTGGTCCCACATGCCAGAAACT CTCGTACAAGTGCCTTGTGGCTATTTATAACGTTTCGGTCCTTACTTA | AGCAGAGCACI. | I AA I CAGGI I | CIAAIACCI | ACCTAAAAT | CAATTATCA | JATGCAAATI | 'ATAAATATTAA' | ГC |
| TGTTCAAACATCCGATGTGATAGGGACTTAAAAAGTTTAGTCCCATCTAAACAGGGCCACAGTCTATGTG ACAAGTTTGTTGAGCTACCATTCCCTGAATTTTTCAAATCAGGTTAGATTTTGCCGGTGTCAGATACAC 990 1000 1010 1020 1030 1040 1050 GAGCATGTCACCACACCCGATAAATATTGCAAAGCCCACAATGATTTTGGTCCCACATGCCAGAAACT CTCGTACAAGTGCCTTGTGGCTATTTATAACGTTTCGGTCCTTACTTA | | | 2 | | | | | |
| ACAAGTTTGTAGGCTACCACTATCCCTGAATTTTTCAAATCAGGGTAGATTTTCCCGGTGTCAGATACAC 990 1000 1010 1020 1030 1040 1050 GAGCATGTTCACCGAACACCGATAAATATTGCAAAGCCCAGAATGATTTTGGTCCCACATGCCAGAAACT CTCGTTACAAGTGGCTTGTGGCTATTTATAACGTTTCGGGTCTTACTAAAAACCAGGGTGTACCGTCTTTGA 1060 1070 1080 1090 1100 111 112 ACCACACCCACATTTCGGTTCATTTTTCAGCTCAGGAAAATGTCCAACAATTTCAGCTCAGGAAATTAAA TGGTGTGGGTGTAAAGCCAAGTAAAAGTCAGGTCCTTTTAGCAGGTTGTTAAATTCAGCTCAACAATTAAA TGGTGTGGGTGTAAAGCCAAGTAAAAGTCAGGTCCTTTTAGCAGGGTTGTTAAACTCAGGTCACGCTTAACTTAACTACAAGTAC 1130 1140 1150 1160 1170 1180 1190 TCGTCCCAGAAAAGGAACAAGTTTGCAGACCCTTACCTCTCGTTAAATCCAGTGCAATTCAATTCACAGTACACTACACTAACCCAGGAACCCCAAAGGAATTCAAGTTCAATGTACAACTCAGGAACCCCAACACACCCTAACCCCAGAGCCAAGAGCAATTAACTCATTAACCCAGGAACCACTTAACTCAGTAACTCAAGTAAGT | | | | | | | | |
| 990 1000 1010 1020 1030 1040 1050 GAGCATGTTCACCGAACACCGATAAATATTGCAAAGCCCAGAATGATTTTGGTCCCACATGCCAGAAACT CTCGTACAAGTGGCTTGTGGCTATTTATAACGTTTCGGGTCTTACTAAAACCAGGGTGTACGGTCTTTGA 1060 1070 1080 1090 1100 1110 1120 ACCACACCCACATTCGGTCTATTTCAGCTCAGGAAAATCGTCCAACATTTCAGCTCAGGAAATTAAA TGGTGTGGGTGTAAAAGCCAAGTTAAAAAGCCAGGAAATTTCAGCTCAGGAAATTAAA TGGTGTGGGTGTAAAAGCCAAGTTAAAAAGTCAGGTCCTTTTAGCACACCACACCACTTCAGGTCAGGAAATTAAA TGGTGTGGGTGTAAAGCCAAGTAAAAAGTCGAGTCCTTTTAGCACAGGTTGTTAAAAGTCGAGGTCCTTTAATTT 1130 1140 1150 1160 1170 1180 1190 TCGTCCGAGAAAAGGAACAAGTTTGGAGCCGTTGGGAACCCTACTCTCGTTAAATCCAGGTGCGAATTGATGTCATG AGCAGGCTCTTTCCTTGTTCAAACCTCGGCAACCCTACTCTCGTTAATCCAGGTCCAGATTGATGTTCATG 1200 1210 1220 1230 1240 1250 1260 AGTCTCATTCATCGACATTGATTAGCCAGGCAACCACTAACCACTTAACCCCGAGCCACAGCCCCAAGCGCTCCGGTA TCACAGTAAAGTACCTCTAAACTAATCGGTCGTTGATTGGTGAATTGGGGCTCGGTTCGGGGCAG 1270 1280 1290 1300 1310 1320 1330 CGTTCGTTGGGCCCCCGCGCGGCAGGCGAGGGGAGACAACGGTCATCTCCGGCCCGGCCAGGAGAGGGAGG | TGTTCAAACAT | CCGATGTGAT | AGGGACTTA | AAAAGTTTA | GTCCCATC: | raaacagggc | CACAGTCTATG | ľG |
| 990 1000 1010 1020 1030 1040 1050 GAGCATGTTCACCGAACACCGATAAATATTGCAAAGCCCAGAATGATTTTGGTCCCACATGCCAGAAACT CTCGTACAAGTGGCTTGTGGCTATTTATAACGTTTCGGGTCTTACTAAAACCAGGGTGTACGGTCTTTGA 1060 1070 1080 1090 1100 1110 1120 ACCACACCCACATTCGGTCTATTTCAGCTCAGGAAAATCGTCCAACATTTCAGCTCAGGAAATTAAA TGGTGTGGGTGTAAAAGCCAAGTTAAAAAGCCAGGAAATTTCAGCTCAGGAAATTAAA TGGTGTGGGTGTAAAAGCCAAGTTAAAAAGTCAGGTCCTTTTAGCACACCACACCACTTCAGGTCAGGAAATTAAA TGGTGTGGGTGTAAAGCCAAGTAAAAAGTCGAGTCCTTTTAGCACAGGTTGTTAAAAGTCGAGGTCCTTTAATTT 1130 1140 1150 1160 1170 1180 1190 TCGTCCGAGAAAAGGAACAAGTTTGGAGCCGTTGGGAACCCTACTCTCGTTAAATCCAGGTGCGAATTGATGTCATG AGCAGGCTCTTTCCTTGTTCAAACCTCGGCAACCCTACTCTCGTTAATCCAGGTCCAGATTGATGTTCATG 1200 1210 1220 1230 1240 1250 1260 AGTCTCATTCATCGACATTGATTAGCCAGGCAACCACTAACCACTTAACCCCGAGCCACAGCCCCAAGCGCTCCGGTA TCACAGTAAAGTACCTCTAAACTAATCGGTCGTTGATTGGTGAATTGGGGCTCGGTTCGGGGCAG 1270 1280 1290 1300 1310 1320 1330 CGTTCGTTGGGCCCCCGCGCGGCAGGCGAGGGGAGACAACGGTCATCTCCGGCCCGGCCAGGAGAGGGAGG | ACAAGTTTGTAG | GCTACACTA: | TCCCTGAA1 | TTTTCAAAT | CAGGGTAGA | ATTTGTCCCG | GTGTCAGATACA | AC |
| GAGCATGTTCACCGAACACCGATAAATATTGCAAAGCCCAGAATGATTTTGGTCCCACATGCCAGAAACT CTCGTACAAGTGGCTTGTGGCTATTTATAACGTTTCGGGTCTTACTAAAACCAGGTGTACGGTCTTTGA 1060 | | | | | | | | |
| CTCGTACAAGTGGCTTGTGGCTATTTATAACGTTTCGGGTCTTACTAAAACCAGGGTGTACGGTCTTTGA | 990 | 1000 | 1010 | 1020 | 1030 | 1040 | 1050 | |
| CTCGTACAAGTGGCTTGTGGCTATTTATAACGTTTCGGGTCTTACTAAAACCAGGGTGTACGGTCTTTGA | GAGCATGTTCA | CCGAACACCG | TAAATAT | GCAAAGCCC | CAGAATGATT | TTTGGTCCCA | CATGCCAGAAAC | т. |
| 1060 | | | | | | | | |
| ACCACACCCACATTTCGGTTCATTTTCAGCTCAGGAAAATCGTCCAACAATTTCAGCTCAGGAAAATTAAA TGGTGTGGGTGTAAAGCCAAGTAAAAGTCGAGTCG | | | | | ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,, | nnic Crioco I | GIACGGICIII | 11.7 |
| ACCACACCCACATTTCGGTTCATTTTCAGCTCAGGAAAATCGTCCAACAATTTCAGCTCAGGAAAATTAAA TGGTGTGGGTGTAAAGCCAAGTAAAAGTCGAGTCG | 1060 | 1070 | 1000 | 1000 | 1100 | 1110 | 1100 | |
| TGGTGTGGGTGTAAAGCCAAGTAAAAGTCGAGTCCTTTTAGCAGGTTGTTAAAGTCGAGTCCTTTAATTT 1130 | | | | | | | | _ |
| 1130 | MCCACACCCACA | 1111CGG11C | ALLITCAGC | 1 CAGGAAAA | TCGTCCAAC | CAATTTCAGC | TCAGGAAATTAA | ıΑ |
| TCGTCCGAGAAAGGAACAGTTTGGAGCCGTTGGGATGAGAGCAATTAGGTCACGCTTAACTACAAGTAC AGCAGGCTCTTTCCTTGTTCAAACCTCGGCAACCCTACTCTCGTTAATCCAGTGCGAATTGATGTTCATG 1200 1210 1220 1230 1240 1250 1260 AGTCTCATTCATCGACATTGATTAGCCAGCAACTAACCACTTAACCCCGAGCCCAAGCCGTCCGT | regreredere. | L'AAAGCCAAG'. | I'AAAAG'I'CG | AGTCCTTT | 'AGCAGGT'TC | TTAAAGTCG | AGTCCTTTAATI | T |
| TCGTCCGAGAAAGGAACAGTTTGGAGCCGTTGGGATGAGAGCAATTAGGTCACGCTTAACTACAAGTAC AGCAGGCTCTTTCCTTGTTCAAACCTCGGCAACCCTACTCTCGTTAATCCAGTGCGAATTGATGTTCATG 1200 1210 1220 1230 1240 1250 1260 AGTCTCATTCATCGACATTGATTAGCCAGCAACTAACCACTTAACCCCGAGCCCAAGCCGTCCGT | | | | | | | | |
| AGCAGGCTCTTTCCTGTTCAAACCTCGGCAACCCTACTCTCGTTAATCCAGTGCGAATTGATGTTCATG 1200 1210 1220 1230 1240 1250 1260 AGTCTCATTCATGACATTGATTAGCCAGCAACTAACCACTTAACCCCCGAGCCAGCC | | | | | | | | |
| 1200 | TCGTCCGAGAA | AGGAACAAGTT | PTGGAGCCG | TTGGGATGA | GAGCAATTA | AGGTCACGCT | TAACTACAAGT | ΛC |
| 1200 | AGCAGGCTCTTT | CCTTGTTCA | AACCTCGGC | AACCCTACT | CTCGTTAAT | CCAGTGCGA | ATTGATGTTCAT | ľG |
| AGTCTCATTCATCGACATTGATTAGCCAGCAACTAACCACTTAACCCCGAGCCCAAGCGCTCCGTA TCAGAGTAACTAGCTGTAACTAATCGGCACTGATTGGTGAATTGGGGCTCGGTCGG | | | | | | | | - |
| ### AGTCTCATTCATCGCACTTGATTAGCCAGCAACTAACCACTTAACCCCGAGCCCAAGCGCTCGTA TCAGAGTAAGTAGCTGTAACTAATCGGTCGTTGATTGGTGAATTGGGGCTCGGTCGG | 1200 | 1210 | 1220 | 1230 | 1240 | 1250 | 1260 | |
| TCAGAGTAAGTAGCTGATACTGATTGGTGAATTGGGGCTCGGTCGG | AGTCTCATTCAT | CGACATTGAT | PTAGCCAGC | DACTAACCA | CTTAACCCC | | | תי |
| 1270 | TCAGAGTAAGTZ | ACCTCTA ACT | ATCCCTCC | TTCATTCCT | C A A TTTCCCC | CTCCCTCCC | CTTCCCCCTCCCCT | - PA |
| CGTTCGTTGGGCCCCGCCGCGCGCAGGCGGAGACAACGGTCATCCGGCGCCCCGGTCGCTCTCCCTCGCTC GCAAGCAACCCGGGGGGAGACCACCGCTCTGTTGCCAGTAGGCCGCGCGCG | 1010101111011 | CCIGIANCIA | MICGGICG | 11GA11GG1 | GAAT 10000 | 50106106 | GII CGCGAGGCA | ΥI |
| CGTTCGTTGGGCCCCGCCGCGCGCAGGCGGAGACAACGGTCATCCGGCGCCCCGGTCGCTCTCCCTCGCTC GCAAGCAACCCGGGGGGAGACCACCGCTCTGTTGCCAGTAGGCCGCGCGCG | 1270 | 1200 | 1200 | 1200 | 1210 | 1200 | | |
| GCAAGCAACCCGGGGGGGGGCGTCCGCCTCTTGTTGCCAGTAGGCCGCGGCGGCGAGAGGGGAGGGA | | | | | | | | |
| 1340 | | | | | | | | |
| GCACGGCCGCACCACCCACTTCGCCACGAACCCGAGCGGAGCGGAGCGTGCATCTCCCCACCACCTCCCGCC CGTGCCGGCTGGTGGTGGGTGAAGCGTGCTCGCGCTGCACGTAGAGGGTTGTAGGGGCGG 1410 1420 1440 1450 1460 1470 ATTTCCTCCCCACCCAAAACCAACCCGCCCGCGTGCGCCGACCGGTGGCCCACTTTACAGGGCCTCACCTCCCCCA TAAAGGAGGGGTGGGTTTTGGTTGGCCGGGCGCGCCGCCGACCGGGTGAAATGTCGCGGAGGTGGAGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCACGTCTCCACTACCACGACTCTCACCACGACGTCTCCACTACACGACTCTCTCCCCCTGGGAAAGGGGGGGAAAAGGGGGGGAAAAGGGGGGGAAAAGGGG | GCAAGCAACCCC | GGGGCGCGCG | CGTCCGCCI | CTGTTGCCA | GTAGGCCGC | CGCGGCCAGC | GAGAGGGAGCGA | G |
| GCACGGCCGCACCACCCACTTCGCCACGAACCCGAGCGGAGCGGAGCGTGCATCTCCCCACCACCTCCCGCC CGTGCCGGCTGGTGGTGGGTGAAGCGTGCTCGCGCTGCACGTAGAGGGTTGTAGGGGCGG 1410 1420 1440 1450 1460 1470 ATTTCCTCCCCACCCAAAACCAACCCGCCCGCGTGCGCCGACCGGTGGCCCACTTTACAGGGCCTCACCTCCCCCA TAAAGGAGGGGTGGGTTTTGGTTGGCCGGGCGCGCCGCCGACCGGGTGAAATGTCGCGGAGGTGGAGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCACGTCTCCACTACCACGACTCTCACCACGACGTCTCCACTACACGACTCTCTCCCCCTGGGAAAGGGGGGGAAAAGGGGGGGAAAAGGGGGGGAAAAGGGG | | | | | | | | |
| CGTGCCGGCTGGTGTGTGTGTGGGTGGCTGGCGCTGCACGTTAGAGGGTTGTAGGGGCGG 1410 1420 1430 1440 1450 1460 1470 ATTTCCTCCCACCCAAAACCAACCGGCCGGGTGGGGCTGGCCCACTTTACAGGGCCTCACCTCCCCCA TAAAGGAGGGGTGGGTTTTGGTTGGCGGGGCGCACCGGGTGAAATGTCGCGAGAGTGAGGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCACGCTCTCCACTACAGGACTCGTCGCC TGGTATTTAGGGGCGGAAAAGGGGGGAAGAGGTGGTGAGTGTGCGAGAGGTTATTGTCTACACGCG TGGTATTTAGGGGCGGAAAAGGGGGGGAAGAGGTGGTGAGTGTGCGAAAGGTTATTCTCTACACGCCG 1550 1560 1570 1580 1590 1600 1610 | | | | | | | | |
| 1410 1420 1430 1440 1450 1460 1470 ATTTCCTCCCCACCCAAAACCAACCCGCCCGCGTGCGGCTGGCCCACTTTACAGCGCCTCACCTCCCCA TAAAGGAGGGTGGTTTTGGTTGGGCGGCGCACGCCGACCGGGTGAAATGTCGCGGAGTGGAGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCACTCTCCACTACACGACTCGTCGCC TGGTATTTAGGGGCGGGAAAGGGGGGGAAAGGTGGTGGTGGTGGCGAGGTGATTGTTCTAGCAGCGGGG 1550 1560 1570 1580 1590 1600 1610 | GCACGGCCGCAC | CACCCACTT | CGCCACGAA | CCCGACGCG | AGCGCGACG | TGCATCTCC | CAACATCCCCGC | :C |
| 1410 1420 1430 1440 1450 1460 1470 ATTTCCTCCCCACCCAAAACCAACCCGCCCGCGTGCGGCTGGCCCACTTTACAGCGCCTCACCTCCCCA TAAAGGAGGGTGGTTTTGGTTGGGCGGCGCACGCCGACCGGGTGAAATGTCGCGGAGTGGAGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCACTCTCCACTACACGACTCGTCGCC TGGTATTTAGGGGCGGGAAAGGGGGGGAAAGGTGGTGGTGGTGGCGAGGTGATTGTTCTAGCAGCGGGG 1550 1560 1570 1580 1590 1600 1610 | CGTGCCGGCGTG | GTGGGTGAAC | CGGTGCTT | GGGCTGCGC | TCGCGCTGC | ACGTAGAGG | GTTGTAGGGGCG | G |
| ATTTCCTCCCACCCAAAACCAACCCGCCCGCTGCGGCTGGCCCACTTTACAGCGCCTCACCTCCCCCA TAAAGGAGGGTGGTTTTGGTTGGCCGGCCCACCCGACCGGGTGAAATGTCGCGGAGTGGAGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAAATCCCGCCCTTTTCCCCCCTCTCCACCACTCACCACGCTCTCCACTACACGACTCGTCGCC TGGTATTTAGGGCCGGAAAACGGGGGGAAAGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTG | | | | | | | | _ |
| ATTTCCTCCCACCCAAACCAACCCGCCCGGGTGGGCTGGCCCACTTTACAGGGCCTCACCTCCCCA TAAAGGAGGGGTGGTTTTGGTTGGCCGGCGCACCGCGACCGGGTGAAATGTCGCGGAGTGAAGGGGGT 1480 | 1410 | 1420 | 1430 | 1440 | 1450 | 1460 | 1470 | |
| TAAAGGAGGGTGGGTTTTGGTTGGCGGGCGCACCGCCGACCGGGTGAAATGTCGCGGAGTGGAGGGGGGT 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCACGCTCTCCACTACACGACTCGTCGCC TGGTATTTAGGGGCGGAAAAGGGGGGGAAGAGGTGGTGAGTGTGTGCGAGAGGTGATGTGCTGAGCAGCGG 1550 1560 1570 1580 1590 1600 1610 | ATTTCCTCCCC | CCCDDDDCCD | | | | | | 170 |
| 1480 1490 1500 1510 1520 1530 1540 ACCATAAATCCCCGCCCTTTTCCCCCCCCTCTCCACCACCACCCAC | TAAAGGAGGGGT | CCCTTTTCCT | TCCCCCCC | CCCACCCC | ACCCCCTCA | AATCTCCCC | CICACCICCCCC | Z1 |
| ACCATAAATCCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCCACTCCCACTCACACGACTCGTCGCC TGGTATTTAGGGGCGGAAAAGGGGGGGAGAGGTGGTGGTGGTGGTGGAGAGGTGTTGT | 111111001100001 | .0001111001 | . 10000000 | CGCACGCCG | ACCGGGIGA | MAIGICGCG | UUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUUU | T |
| ACCATAAATCCCCGCCCTTTTCCCCCCCTCTCCACCACTCACCCACTCCCACTCACACGACTCGTCGCC TGGTATTTAGGGGCGGAAAAGGGGGGGAGAGGTGGTGGTGGTGGTGGAGAGGTGTTGT | 1400 | 1400 | 1500 | 1510 | 4500 | | | |
| TGGTATTTAGGGGCGGAAAAGGGGGGGAGAGGTGGTGAGTGGTGAGAGGTGATGTGCTGAGCAGCGG 1550 1560 1570 1580 1590 1600 1610 | | | | | | | | |
| 1550 1560 1570 1580 1590 1600 1610 | ACCATAAATCCC | CGCCCTTTTC | LCCCCCCTC | TCCACCACT | CACCACGCT | CTCCACTAC | ACGACTCGTCGC | C |
| | TGGTATTTAGGG | GCGGGAAAAG | GGGGGGAG | AGGTGGTGA | GTGGTGCGA | GAGGTGATG | TGCTGAGCAGCG | G |
| | | | | | | | | |
| GTCTTGCTCTGCTGCCTCTCGCGCCCGCGCAGCAGTGAGCAGCAAGAGCAGTCTAGGGGGATCTACC | | | | | | | | |
| | GTCTTGCTCTGC | TGCCTCTCGC | GCCCGCGC | AGCAGTGAG | CAGCAGCAA | GAGCAGTCT | AGGGGGATCTAC | C |

FIG. 5B

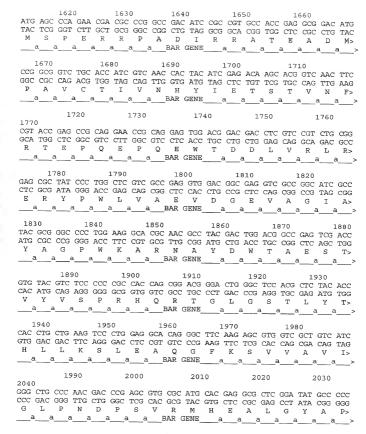


FIG. 5C

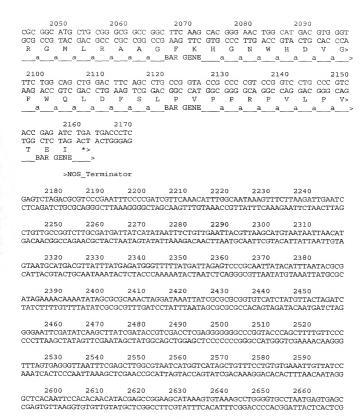


FIG. 5D

- ${\tt TAACTCACATTAATTGCGTTGCGCTCACTGCCCGCTTTCCAGTCGGGAAACCTGTCGTGCCAGCTGCATT}$ ATTGAGTGTAATTAACGCAACGCGAGTGACGGGCGAAAGGTCAGCCCTTTGGACAGCACGGTCGACGTAA TTACTTAGCCGGTTGCGCGCCCCTCTCCGCCAAACGCATAACCCGCGAGAAGGCGAAGGAGCGAGTGACT
- 2950 2960 2970 2980 2990 3000 3010
 AGGCCGCGGTGCTGCTGCTCCATAGGCTCCGCCCCCTGACGAGCATCACAAAAATCGACGCTCAAG
 TCCGGCGCAACGACCCCAAAAAGTATCCCAGGCGGGGGGACTCCTCGTAGTGTTTTTTAGCTGCGAGTTC
- 3020 3030 3040 3050 3060 3070 3080 TGAGAGGTGGGGGAAACCCGACAGGACTATAAAAGATACCAGGGGTTTCCCCCTGGAAACCCCGACGACCGCTTTGGGCTGTCCTGATATTTCTATGGTCCGCAAAGGGGACCTTTCGAGGGAGCACGCG
- 3090 3100 3110 3120 3130 3140 3150 TCTCCTGTTCCGACCCTTACCGGATACCTGTCCGCCTTTCTCCCTTCTGCGAAGCGTGGGGCTTT ACAGGACAAGGCTAGGACGGAAAGAGGAAACCCCTTCCGACCGCGAAA
- 3230 3240 3250 3260 3270 3280 3290 ACCCCCGGTTCAGCCCGACCGGCCCTTATCCGGTAACTATCGTTTTGAGTCCAACCCGGTAAGAACACTGGGGGGCAATTGGTGGGCAATTGAGTCAGACTCAGGTTGGGCCATTCTGTG
- 3300 3310 3320 3330 3340 3350 3360 GACTTATCGCCACTGGCAGCAGCACCACTGGTAACAGGATTAGCAGAGCGAGGTATGTAGGCGGTGCTACAG CTGAATAGCGGTGACCGTCGTGGCGTGACCATTGTCCTAATCGTCCATACATCCGCCAGCATGTC

| | CTCAGTGGA | ACGAAAACI | | GGATTTTG | TCATGAGAI | 3640 TATCAAAAAGGAT ATAGTTTTTCCTA |
|--------------|------------|-----------|-----------|------------|-----------|---|
| | CCTTTTAAA | TTAAAAATC | | ATCAATCT | AAGTATATA | 3710 ATGAGTAAACTTGG ACTCATTTGAACC |
| | | ATCAGTGAG | GCACCTAT | | TGTCTATTI | 3780 CGTTCATCCATAG GCAAGTAGGTATC |
| | CCGTCGTGT. | AGATAACTA | CGATACGG | | CATCTGGC | 3850 CCAGTGCTGCAAT GGTCACGACGTTA |
| | CCCACGCTC. | ACCGGCTCC | AGATTTAT | | CCAGCCAGC | 3920 CCGGAAGGGCCGAG GCCTTCCCGGCTC |
| | CCTGCAACT | TTATCCGCC | TCCATCCAC | GTCTATTAA1 | TGTTGCCGG | 3990 GAAGCTAGAGTAA CTTCGATCTCATT |
| | | TGCGCAACO | TTGTTGCC | | GCATCGTGG | 4060 TGTCACGCTCGTC ACAGTGCGAGCAG |
| GTTTGGTATGGC | | CTCCGGTTC | CCAACGATO | CAAGGCGAGT | TACATGATO | 4130 CCCCATGTTGTGC GGGGTACAACACG |
| | 'AGCTCCTTC | GGTCCTCC | ATCGTTGT | | TTGGCCGCA | 4200 GTGTTATCACTCA 'CACAATAGTGAGT |
| | CACTGCATA | ATTCTCTT | CTGTCATG | | GATGCTTTT | 4270 CTGTGACTGGTGA GACACTGACCACT |

FIG. 5F

 $\tt GTACTCAACCAAGTCATTCTGAGAATAGTGTATGCGGCGACCGAGTTGCTCTTGCCCGGCGTCAATACGGCATGAGTTGGTTCAGTAAGACTCTTATCACATACGCCGCTGGCTCAACGAGAACGGGCCGCAGTTATGCC$

4350 4360 4370 4380 4390 4400 4410
GATAATACCGCGCCACATAGCAGAACTTTAAAAGTGCTCATCGGAAAACCTTCTTCGGGGCGAAAAC
CTATTATGGCGCGGGTATCGTCTTGAAATTTCACGAGTAGTAACCTTTTGCAAGAAGCCCGCGTTTTG

4420 4430 4440 4450 4460 4470 4480 TCTCAAGGATCTTACCGCTGTTGGATCCAGTTCGATGTAACCCACTCGTGCACCCAACTGATCTTCAGC AGAGTTCCTAGAATGGCGACAACTCTAGGTCAACCTACATTGGGTGAGCACCTGGGTTGACTTGGATGAGTGGAGTAGAACTGAGATGGAGTAGAACTGAGATGGAGTAGAACTG

4490 4500 4510 4520 4530 4540 4550
ATCTTTACTTCACCACCGTTTCTGGGTGAGCAAAACAGGAAGGCAAAATGCCGCAAAAAAAGGGAATA
TAGAAAATGAAAGTGGTCGCAAAGACCCACTCGTTTTTGTCCTTCCGTTTTACGGGGTTTTTCCCTTAT

4700 TCCCCGAAAAGTGC AGGGGCTTTTCACG

FIG. 5G